



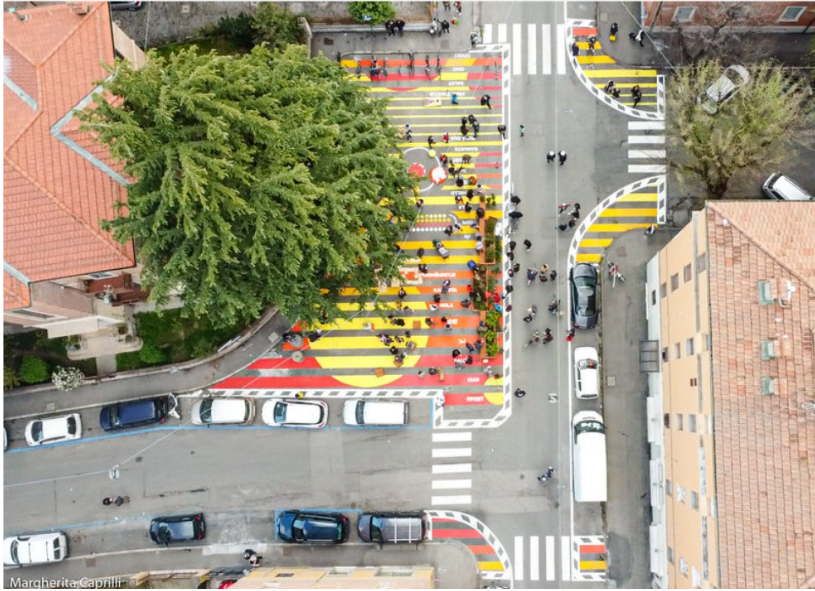
EXPERIMENTING WITH CITY STREETS TO TRANSFORM URBAN MOBILITY

Across Europe, cities are trying to radically reduce their reliance on car-based mobility in order to address sustainability challenges. Two things are lacking in these efforts towards a 'post-car' city: a proactive vision of cities that are both sustainable and accessible without cars, and effective strategies to deal with systematic resistance to change. The aim of EX-TRA is to address these shortcomings.



Giovanni Lanza
WalkUrban final conference
Dortmund, 07/03/2024

Aims of the project



Street Experiments are a powerful tool in urban planning for liveable, sustainable and resilient cities. They are quick & cheap to implement compared to traditional planning allowing testing their effectiveness and rethinking their design in an experimental approach to urban streets transformation.



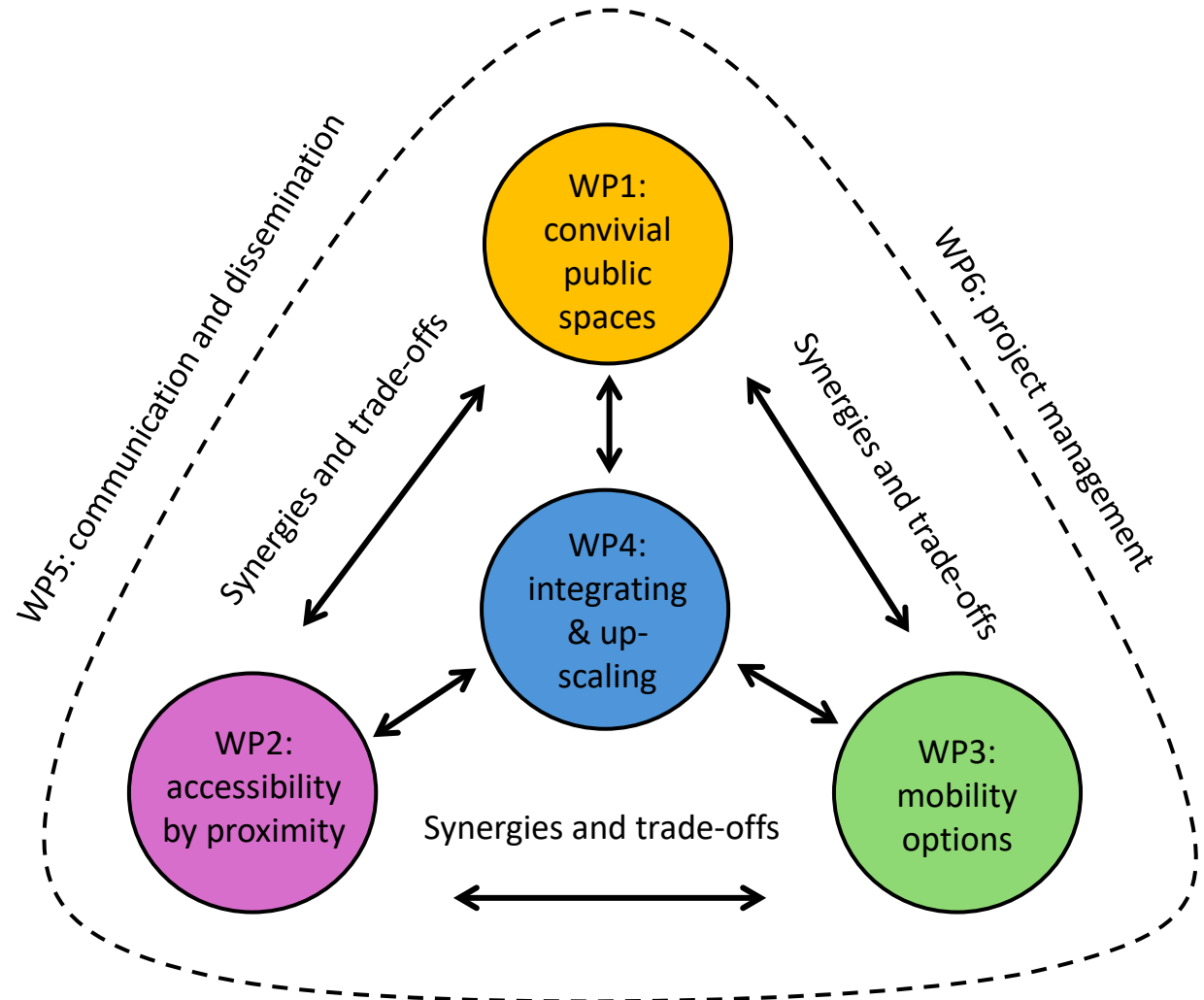
Aims of the project

Central to EX-TRA’s approach are **transition experiments in city streets**, or intentional, temporary changes in street use, regulation and/or form, aimed at exploring systemic change towards a ‘post-car’ city.

The project generates insights into:

1. Possible combinations of **physical design and regulation** towards more inclusive **convivial public spaces**;
2. Transport and land use conditions for the purpose of enabling and improving walking and cycling accessibility by proximity in city districts;
3. Shared mobility platforms and micro-mobility and freight delivery options which complement attractive streets and accessible districts;
4. Strategies of change that can accelerate the **transition towards a ‘post-car’ city**.

EX-TRA outcomes include a connection between **tools, issues and processes** to unveil the opportunities of transition experiments in city streets.



Convivial public spaces (WP1)

Identify **designs and regulations** that increase the types of usage and inclusivity amongst users of city streets (UoW).

Main activities and outcomes:

- ➔ Exploration of **people’s perceptions** about street experiments implemented in project testbeds through surveys and digital engagement platforms
- ➔ Analysis of **design and regulation-related factors challenging or contributing to the success of street experiments**
- ➔ Development of **StreetECHO**, an **expert digital tool to support local communities and authorities in enhancing the inclusivity and transparency of decision-making processes** related to street experiments and street changes

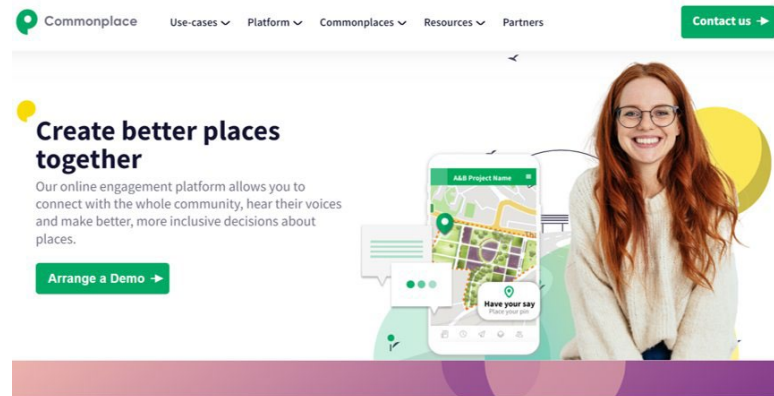
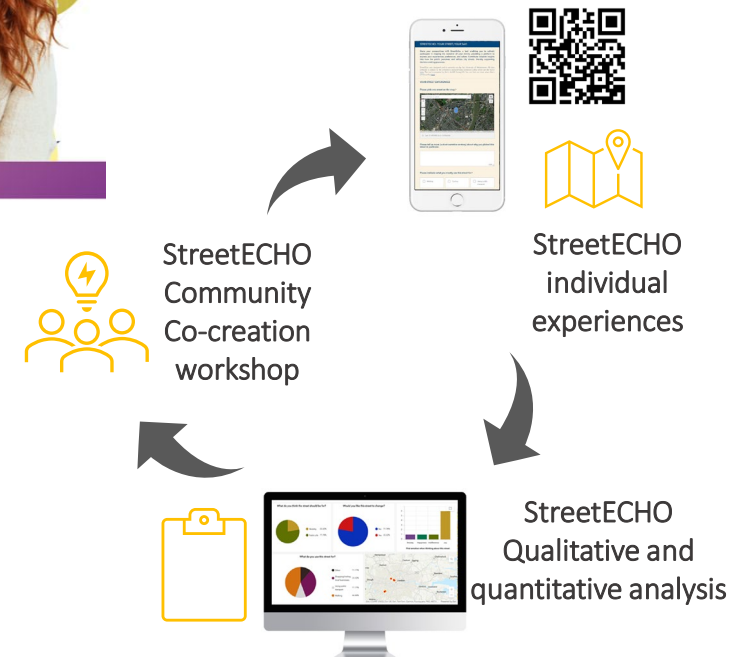


Image © London Borough of Redbridge.



Accessibility by proximity (WP2)

Identify **transport and land use conditions** for enhancing walking and cycling accessibility in city districts (Polimi + TUM)

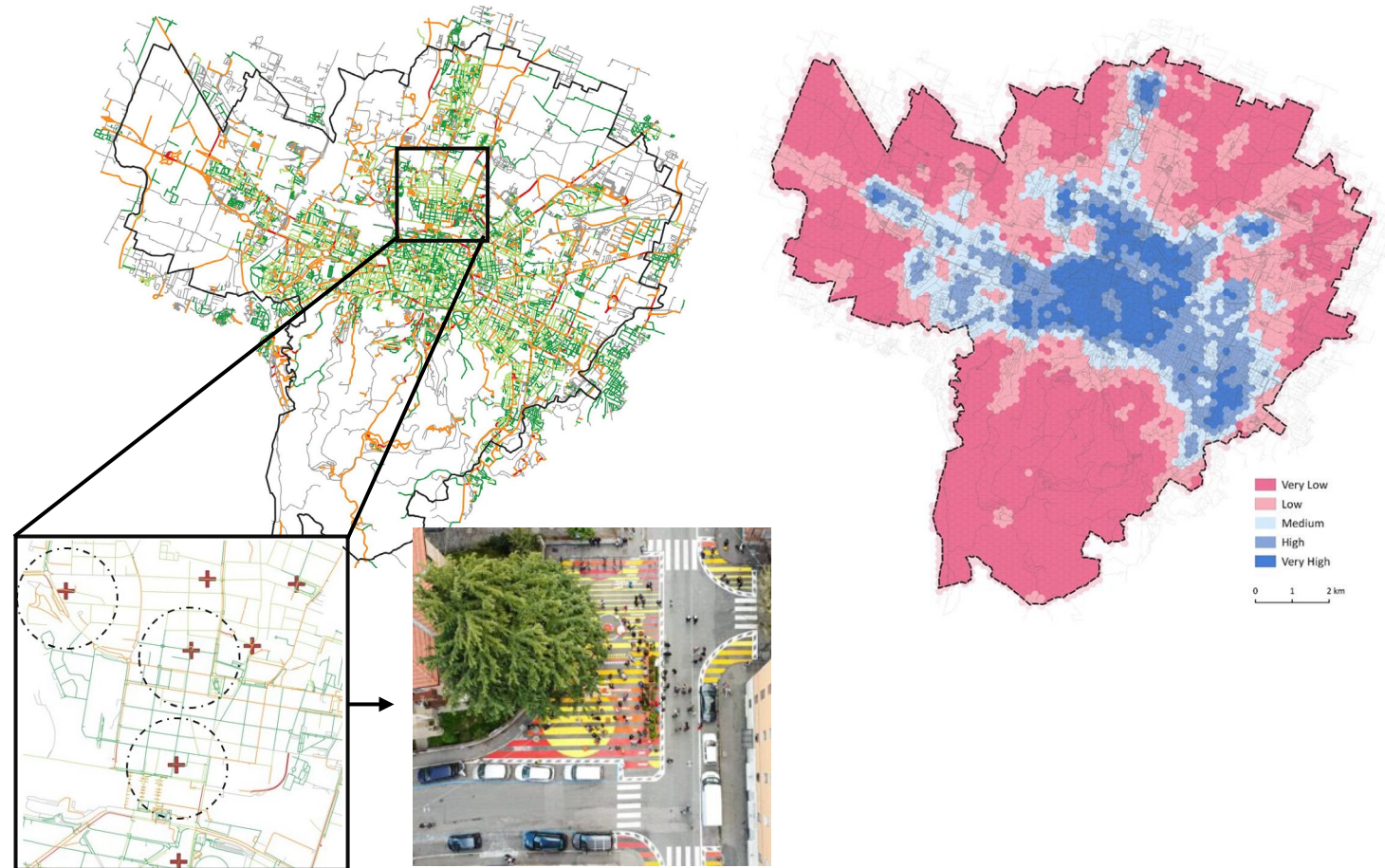
Main activities and outcomes:

- Development of two digital tools to **assess the levels of walkability/bikeability and accessibility by proximity** at the city and district scale;
- The tools **assess the impacts** of experiments on street quality, active mobility and accessibility, providing **guidelines** for implementing accessible street experiments

IAPI (*Inclusive accessibility by Proximity Index*), developed by Polimi, is a **GIS-based methodology to assess walkability and cyclability considering different street users and their capabilities. IAPI combines a desk-based approach with citizen involvement.**

1: DSS to implement new schoolstreets

2: Mapping the «15 minute city» in Bologna



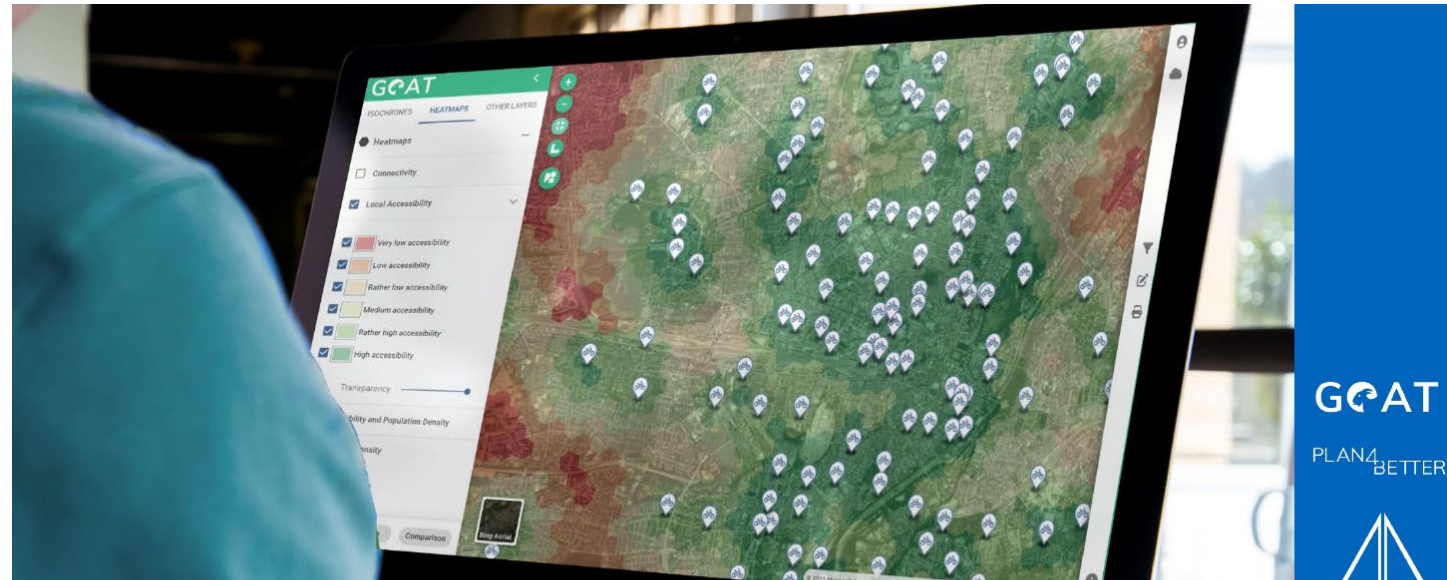
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GOAT (*Geo open Accessibility Tool*), developed by TUM, is an **interactive, dynamic and data-driven planning tool for accessibility planning**.



Key values:

Easy to use, data -driven, interactive and flexible tool for sustainable urban and transport

Possible areas of application:

Analysis and scenario construction for urban land-use planning, citizen participation process, local transport plans...

Main users:

Public authorities, e.g., cities, counties, regions, planning practitioners real estate, academia

GOAT

PLAN4BETTER



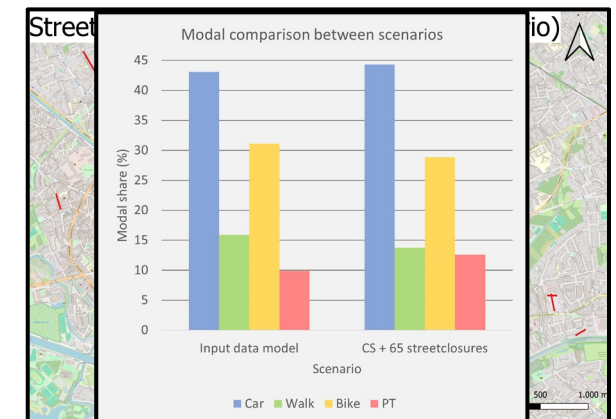
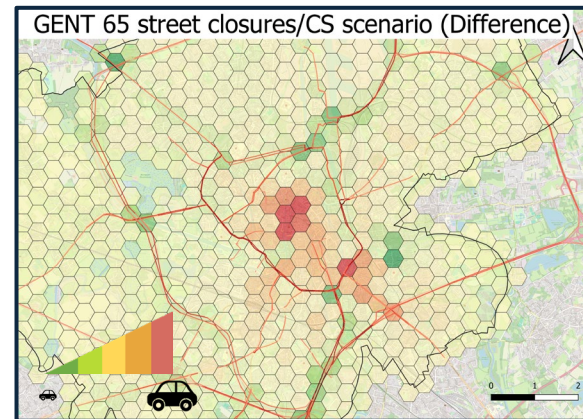
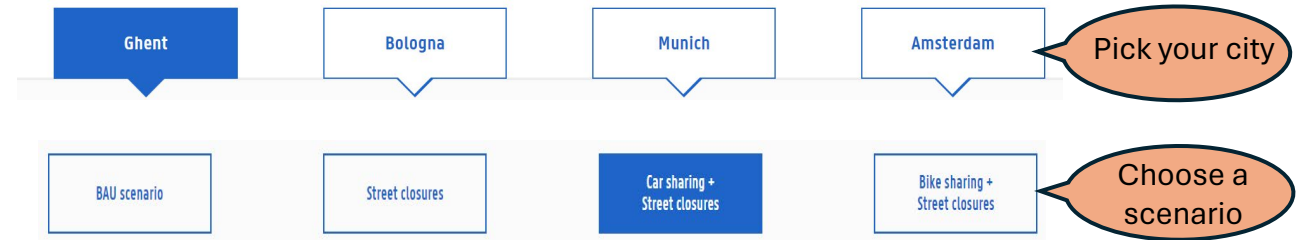
TUM

Mobility options (WP3)

Identify **shared mobility platforms and micro-mobility and freight delivery options** which complement inclusive streets and accessible districts (lead GU)

Main activities and outcomes:

- ➔ Analysis of mobility behaviors and its evolution following tactical and permanent changes in the street network and transport systems
- ➔ Mobility options are investigated in different scenarios using agent-based simulation models to support policy decisions
- ➔ Development of the **Dashboard for Alternative Mobility Scenarios (D4AMS)**, an easy-to-use digital tool to visualize and compare the impact of different scenarios on car traffic (BAU, street closure, micromobility)



Compare scenarios to BAU

Identify **strategies of change** that can accelerate the transition towards a ‘post-car’ city (UoA)

Main activities and outcomes:

- ➔ Analysis of testbeds’ enablers and barriers to street experiments based on a common evaluative framework
- ➔ Policy guidelines and recommendation to establish a transition towards a ‘post-car’ city in different policy contexts

Development of a **Conversation Starter Deck and Strategies for Change workshop** as tools to facilitate the process of designing and implementing of an experiment or for those who have already started but find themselves stuck in the process



Conclusions

EX-TRA reached its goals by providing a multidisciplinary perspective on streets experiments focusing on their physical and social impacts.

- New theoretical frameworks were developed to explore the role of street experiments as powerful contributors to sustainable urban transitions
- New methodologies and tools were introduced to assess different impacts of street experiments concerning their social acceptance, the contribution in increasing accessibility and walkability in cities, potential changes in mobility behavior
- Policy guidelines and engagement tools were drafted to support policymakers in experimenting with streets
- The project reached hundreds of policymakers, practitioners and academic in the testbed cities and beyond, generating spin-offs that will keep EXTRA alive after its end.



<https://www.ex-tra-project.eu/>



Thank you!



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